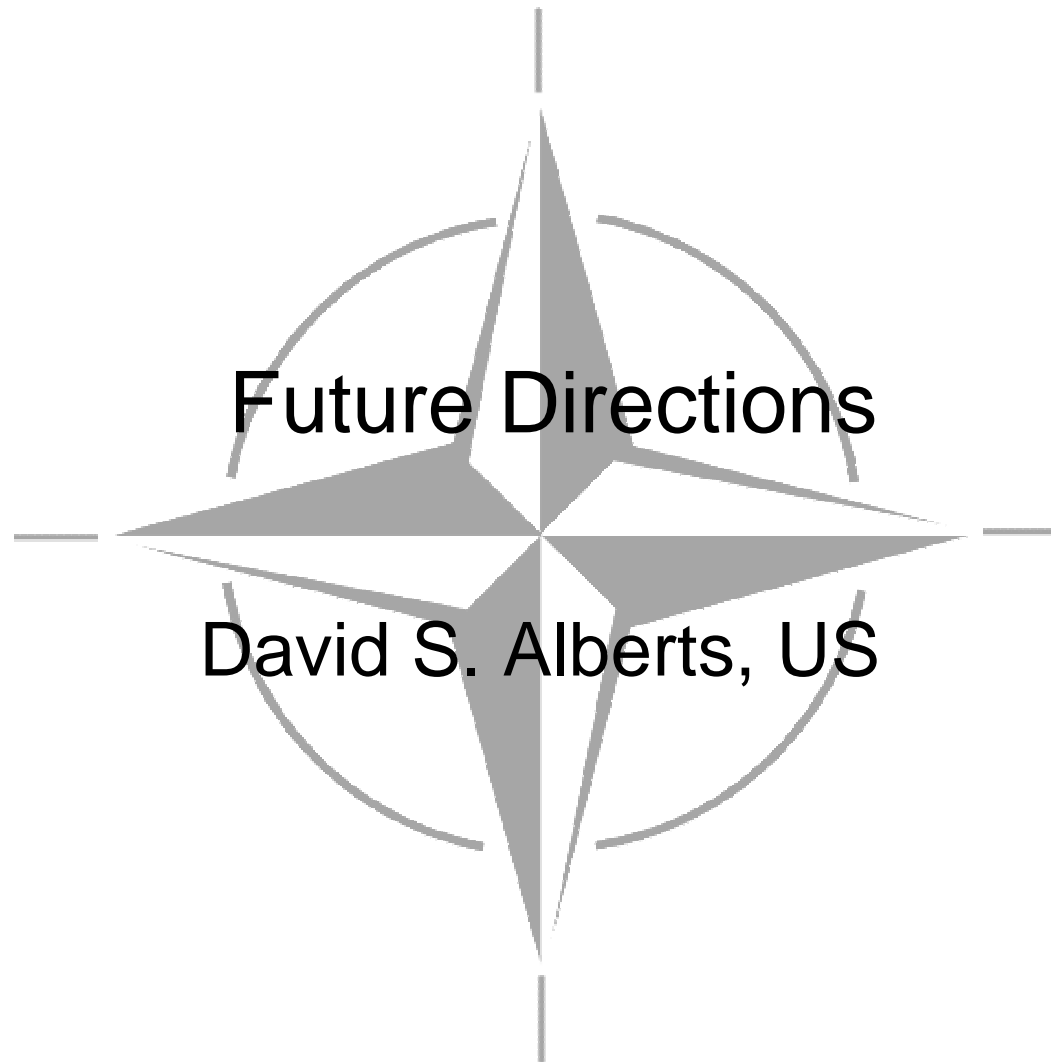




NATO Code of Best Practice (COBP) for C2 Assessment



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Future Directions

- What's Next After SAS-039?
- What's the Future of Military Analysis?

After SAS-039

- Tomorrow SAS-026 Members Will Review the Feedback Received During this Symposium
- May - June '02 Continue Consultations via WWW
- Informal Meeting at 2002 C2RTS (Monterey, California)
- Presentations on COBP
 - MORS & C2RTS - June 2002, ISMOR - August 2002
- Publish Revised COBP C2 Assessment
 - Web Version - Summer 2002, NATO Document to follow
- Potential Follow On to SAS-026
 - Lecture Series, COBP Experimentation, Special Topic in C2 Analysis



Future of Military Analysis

- Purpose of Analyses are to Inform Decisions
- To do so, Future Analyses Will Need to Effectively Deal With:
 - Nature of Information Age Organizations
 - Full Spectrum of Missions
 - Characteristics and Capabilities of “Non-traditional”, Asymmetric Adversaries
 - Uncertainty, Risk, Agility



Information Age Organizations

Will Have New Ways of

- Dealing With the Future (Uncertainties & Risks)
- Developing Capabilities
- Managing (Command and Control)
- Dealing with Information and Systems



Information Age Organizations

New Ways of Dealing With the Future

- Predict and Plan → Prepare and Adapt
- Perfect Tasks → Develop Agility
- Develop I&W → Develop Persistent Surveillance



Information Age Organizations

New Ways of Dealing Developing Capabilities

- Define Requirements → Experiment
- Engineer → Grow
- Insert Technology → Co-evolve
Mission Capability Packages
- Test Systems → Assess Operations



Information Age Organizations

New Approaches to Command and Control

- Commander's Intent → Command Intent
- Do What I Tell You → Do What Makes Sense
- Control → Converge
- Constrain Subordinates → Enable Subordinates
- Synchronize → Self Synchronize
- Avoid Risk → Manage Risk



Information Age Organizations

New Ways of Dealing with Information and Systems

- System of Systems → Federation of Systems
- Server-Client → Peer-to-Peer
- Push → Pull
- Use and Distribute → Post Before Process



Full Spectrum of Missions

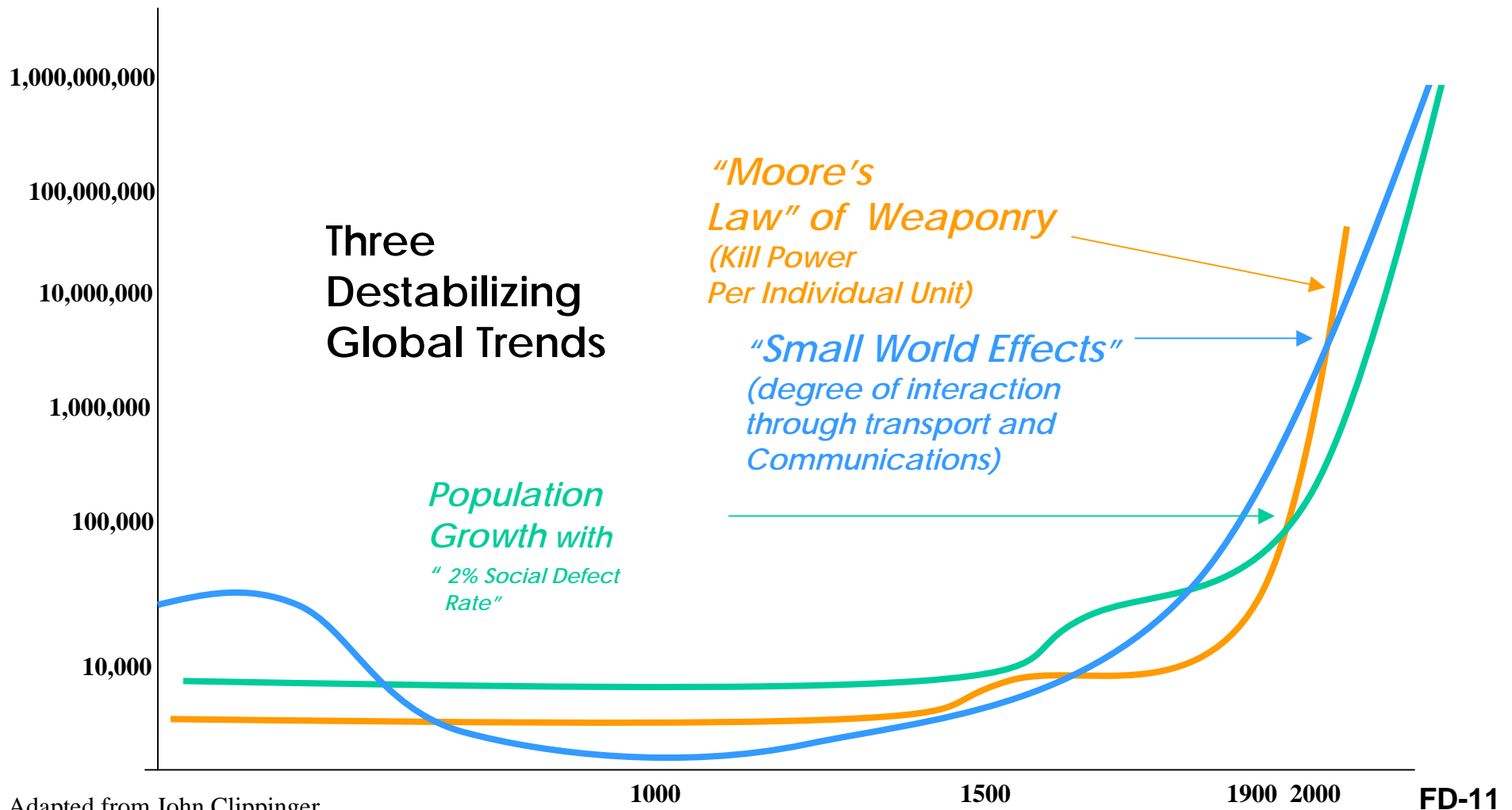
- From “ Conventional” Terrorism to WMD
- Focus on Asymmetries
- Recognize the Intelligence of Adversaries
- Attention to what is important across the board
 - Quality Awareness
 - Collaboration
 - Shared Awareness
 - Agile C2
 - Inter-agency, Coalition



Non-Traditional & Asymmetric Adversaries

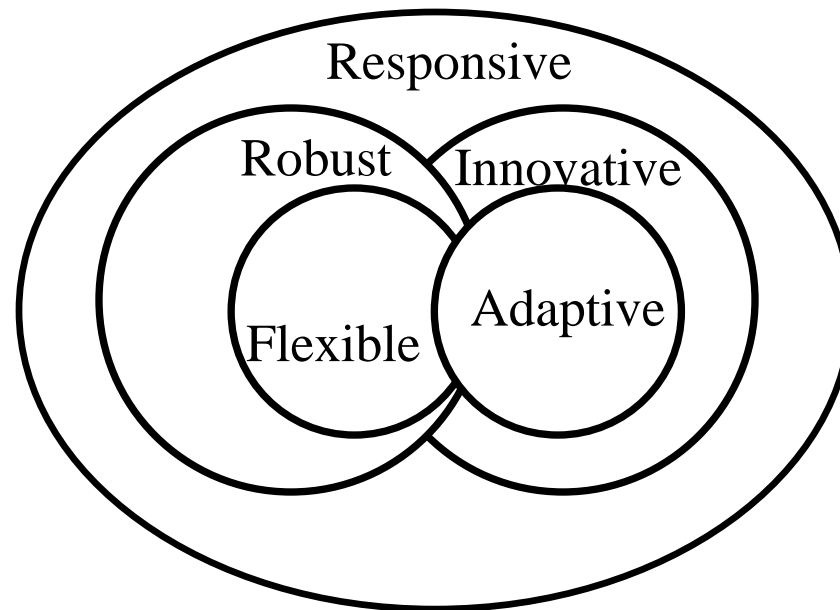
Collapse of Strategic Deterrence

People



Uncertainty, Risk, and Agility

- The Answer to Uncertainty and Risk is Agility
- Agility Has Five Components





Implications for Analysis

- Problem Formulation
 - New Measures of Merit
 - More Variables
 - Fewer Constraints on Variables
- Models
 - Increased Emphasis on Representation of Information and Cognitive Domains
 - Ability to Change Processes and Organizations
 - Ability to Generate Emergent Behaviors
- Solution Strategies
 - Scenario Independent Approaches
 - Move from Optimization to Generation of Response Surfaces
- New Customers
 - Experiments and Experimental Campaigns
 - Defense Strategists

Future Directions

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